Air Quality

PERMIT TO CONSTRUCT

Permittee	Yellowstone Plastics, Inc.
Permit Number	P-2016.0041
Project ID	61744
Facility ID	019-00041
Facility Location	3725 West 65th South Idaho Falls, ID 83042

Permit Authority

This permit (a) is issued according to the "Rules for the Control of Air Pollution in Idaho" (Rules), IDAPA 58.01.01.200–228; (b) pertains only to emissions of air contaminants regulated by the State of Idaho and to the sources specifically allowed to be constructed or modified by this permit; (c) has been granted on the basis of design information presented with the application; (d) does not affect the title of the premises upon which the equipment is to be located; (e) does not release the permittee from any liability for any loss due to damage to person or property caused by, resulting from, or arising out of the design, installation, maintenance, or operation of the proposed equipment; (f) does not release the permittee from compliance with other applicable federal, state, tribal, or local laws, regulations, or ordinances; and (g) in no manner implies or suggests that the Idaho Department of Environmental Quality (DEQ) or its officers, agents, or employees assume any liability, directly or indirectly, for any loss due to damage to person or property caused by, resulting from, or arising out of design, installation, maintenance, or operation of the proposed equipment. Changes in design, equipment, or operations may be considered a modification subject to DEQ review in accordance with IDAPA 58.01.01.200–228.

Date Issued DRAFT [redacted] 2016

Morrie Lewis, Permit Writer

Mike Simon, Stationary Source Manager

Contents

1 Permit Scope

Purpose

1.1 This is a permit to construct (PTC) a flexographic printing process (roller coating) for polyethylene plastic bags.

1.2 This PTC replaces Tier II Operating Permit No. 019-00041, issued on April 2, 2002.

Regulated Sources

1.3 Table 1.1 lists all sources of regulated emissions in this permit.

Table 1.1 Regulated Sources

Permit Section	Source	Control Equipment
2	Flexographic Printing Presses (P-1 through P-6) • PCMC 6 Color Flexographic Printing Press (P-1), with 1.2 MMBtu/hr between-color dryer and 1.2 MMBtu/hr tunnel dryer • PCMC 8 Color Flexographic Printing Press (P-2), with 1.2 MMBtu/hr between-color dryer and 1.2 MMBtu/hr tunnel dryer • F&K 10 Color Flexographic Printing Press (P-3), with between-color dryer and tunnel dryer at ≤10 MMBtu/hr combined • FSC Telia 8 Color Printing Press (P-4), with between-color dryer and tunnel dryer at ≤10 MMBtu/hr combined • Vision 8 Color Flexographic Printing Press (P-5), with 0.8 MMBtu/hr between-color dryer and 0.8 MMBtu/hr tunnel dryer • Flexotecnica EVO XG 10 Color Flexographic Printing Press (P-6), with 0.751 MMBtu/hr between-color dryer and 0.853 MMBtu/hr tunnel dryer	Regenerative Thermal Oxidizer (RTO)
2	Ink and solvent mixing activities and Press cleanup activities	None
2	Plant Building Heating Units (1 and 2) Manufacturer/model: Reyco 600 GasPac Maximum Capacity: 6.7 MMBtu/hr Date of Construction: 1999 Fuel: natural gas Manufacturer/model: Reyco 500 GasPac Maximum Capacity: 4.9 MMBtu/hr Date of Construction: 1999 Fuel: natural gas	None

2 Flexographic Printing Process

2.1 Process Description

The facility has six flexographic printing lines, each with a printing press for coating polyethylene plastic bags.

2.2 Control Device Descriptions

Table 2.1 Flexographic Printing Process Description

Emissions Units / Activities	Control Devices	Emission Points
Flexographic Printing Presses (6)	Regenerative Thermal Oxidizer (RTO) Manufacturer: Ship and Shore Environmental Model: SSE-50K-95X-RTO Design Flow: 50,000 scfm, 250 HP blower Burner: 8.6 MMBtu/hr natural gas Control efficiency: ≥97% destruction removal efficiency	RTO stack
Ink and solvent mixing activities and Press cleanup activities	None	(fugitive)
Plant Building Heating Units	None	Plant Building Heating Unit stacks

Emission Limits

2.3 VOC Emission Limit

The emissions from the RTO stack shall not exceed any corresponding emissions rate limits listed in Table 2.2.

Table 2.2 Flexographic Printing Process Emission Limits [a]

Source Description	VOC	
	lb/hr [b]	T/yr [c]
RTO stack	12.3	54.0

a) In absence of any other credible evidence, compliance is ensured by complying with permit operating, monitoring, and recordkeeping requirements.

b) Pounds per hour, as determined by a test method prescribed by IDAPA 58.01.01.157, EPA reference test method, continuous emission monitoring system (CEMS) data, or DEQ-approved alternative.

c) Tons per any consecutive 12-calendar month period, calculated as a 12-month rolling total and including emissions during startup, shutdown, and malfunction.

2.4 Odors

The permittee shall not allow, suffer, cause, or permit the emission of odorous gases, liquids, or solids into the atmosphere of such nature and duration and under such conditions as would be injurious to human health or welfare, to animal or plant life, or to property, or to interfere unreasonably with the enjoyment of life or property in accordance with IDAPA 58.01.01.776.

2.5 Opacity Limit

Emissions from the RTO stack, flexographic printing press dryer stacks, Plant Building Heating Unit stacks, or any other stack, vent, or functionally equivalent opening associated with the flexographic printing process, shall not exceed 20% opacity for a period or periods aggregating more than three minutes in any 60-minute period as required by IDAPA 58.01.01.625. Opacity shall be determined by the procedures contained in IDAPA 58.01.01.625.

Operating Requirements

2.6 RTO Temperature

The RTO combustion temperature shall be maintained at a temperature greater than or equal to 1,475 degrees Fahrenheit whenever any of the flexographic printing presses are operating.

2.7 RTO Temperature Monitor

The RTO shall be equipped with a continuous monitoring and recording device to measure the RTO operating temperature. The temperature monitoring device shall be installed, maintained, and calibrated in accordance with manufacturer specifications and recommendations.

2.8 RTO Operation

The permittee shall operate the RTO at all times when any of the flexographic printing presses are operating. Any period of time that the flexographic printing presses are in operation while the RTO is not in operation shall be treated as an excess emission event, and the permittee shall comply with excess emission procedures and requirements included in the General Provisions of this permit.

2.9 Ink Usage

The maximum amount of all ink materials used at the facility shall not exceed 14,250 pounds per calendar week period.

2.10 Solvent Usage

The maximum amount of all solvent materials used at the facility shall not exceed 21,750 pounds calendar week period. Solvent materials include all reducing solvent, cleaning solvent, and any other solvent materials (combined).

2.11 Fuel Usage

- The RTO shall only combust natural gas fuel and flexographic printing process emissions.
- Flexographic printing press dryers and any other fuel-fired units at the facility shall combust natural gas only.
- The rolling 12 calendar month natural gas used by the facility shall not exceed 79,999,712 standard cubic feet per year (scf/yr).

2.12 Ink and Solvent Material Formulations

The permittee shall use only the ink and solvent materials listed in Table 2.3 as raw materials. Any changes in ink and solvent material formulations at the facility may require a permit to construct (or permit revision) in accordance with IDAPA 58.01.01.201 unless the usage of alternate ink and solvent material formulations can be demonstrated to result in potential emissions lower than the emission limits provided in Table 2.3, and potential emissions lower than all emission screening levels for toxic air pollutants provided in IDAPA 58.01.01.585-586.

Table 2.3 Flexographic Printing Process Ink and Solvent Materials

Ink materials	High Opaque White
	Polyamide Proc Black
	1190 Pro Black
Solvent materials	Univar NPAC blend (any blend ratio, including 50/50, 80/20, and 90/10)
	AMPAC #4

Monitoring and Recordkeeping Requirements

2.13 RTO Temperature Monitoring

The RTO combustion temperature shall be recorded at least once every fifteen minutes while any of the flexographic printing presses are operating to ensure compliance with RTO Temperature operating requirement.

2.14 Odor Complaint Monitoring

The permittee shall maintain records of all odor complaints received to ensure compliance with the Odors limit. The permittee shall take appropriate corrective action as expeditiously as practicable. At a minimum, records shall include the date each complaint was received and a description of the following: the complaint, the permittee's assessment of the complaint, any corrective action taken, and the date the corrective action was taken.

2.15 Ink Monitoring

Every calendar week, the permittee shall monitor and record the amount of each ink material used at the facility in pounds per week to demonstrate compliance with the Ink Usage limit.

2.16 Solvent Monitoring

Every calendar week, the permittee shall monitor and record the amount of each solvent material used at the facility to demonstrate compliance with the Solvent Usage limit.

2.17 Fuel Monitoring

Each calendar month, the permittee shall monitor and record the amount of natural gas used by the facility for the previous month (cf/month) and for the previous 12 calendar months (cf/yr) to demonstrate compliance with the Fuel Usage limit.

2.18 Ink and Solvent Material Formulations Monitoring

To ensure compliance with the Ink and Solvent Material Formulations requirement when alternate ink and solvent materials are in use at the facility, records shall be maintained onsite demonstrating that facility-wide potential emissions will not exceed the VOC Emission Limit and will not exceed all emission screening levels provided in IDAPA 58.01.01.585–586. Potential emissions shall be calculated as the maximum emission rate in pounds per hour over a 24-hour averaging period for substances listed in Section 585, and over an annual averaging period for substances listed in Section 586. Records shall include safety data sheets for all ink and solvent materials used at the facility in the current calendar year.

3 General Provisions

General Compliance

3.1 The permittee has a continuing duty to comply with all terms and conditions of this permit. All emissions authorized herein shall be consistent with the terms and conditions of this permit and the "Rules for the Control of Air Pollution in Idaho." The emissions of any pollutant in excess of the limitations specified herein, or noncompliance with any other condition or limitation contained in this permit, shall constitute a violation of this permit, the "Rules for the Control of Air Pollution in Idaho," and the Environmental Protection and Health Act (Idaho Code §39-101, et seq.)

[Idaho Code §39-101, et seq.]

3.2 The permittee shall at all times (except as provided in the "Rules for the Control of Air Pollution in Idaho") maintain in good working order and operate as efficiently as practicable all treatment or control facilities or systems installed or used to achieve compliance with the terms and conditions of this permit and other applicable Idaho laws for the control of air pollution.

[IDAPA 58.01.01.211, 5/1/94]

3.3 Nothing in this permit is intended to relieve or exempt the permittee from the responsibility to comply with all applicable local, state, or federal statutes, rules, and regulations.

[IDAPA 58.01.01.212.01, 5/1/94]

Inspection and Entry

3.4 Upon presentation of credentials, the permittee shall allow DEQ or an authorized representative of DEQ to do the following:

- Enter upon the permittee's premises where an emissions source is located, emissions-related activity is conducted, or where records are kept under conditions of this permit;
- Have access to and copy, at reasonable times, any records that are kept under the conditions of this permit;
- Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit; and
- As authorized by the Idaho Environmental Protection and Health Act, sample or monitor, at reasonable times, substances or parameters for the purpose of determining or ensuring compliance with this permit or applicable requirements.

[Idaho Code §39-108]

Construction and Operation Notification

3.5 This permit shall expire if construction has not begun within two years of its issue date, or if construction is suspended for one year.

[IDAPA 58.01.01.211.02, 5/1/94]

3.6 The permittee shall furnish DEQ written notifications as follows:

- A notification of the date of initiation of construction, within five working days after occurrence; except in the case where pre-permit construction approval has been granted then notification shall be made within five working days after occurrence or within five working days after permit issuance whichever is later;

- A notification of the date of any suspension of construction, if such suspension lasts for one year or more;
- A notification of the anticipated date of initial start-up of the stationary source or facility not more than sixty days or less than thirty days prior to such date; and
- A notification of the actual date of initial start-up of the stationary source or facility within fifteen days after such date; and
- A notification of the initial date of achieving the maximum production rate, within five working days after occurrence - production rate and date.

[IDAPA 58.01.01.211.03, 5/1/94]

Performance Testing

3.7 If performance testing (air emissions source test) is required by this permit, the permittee shall provide notice of intent to test to DEQ at least 15 days prior to the scheduled test date or shorter time period as approved by DEQ. DEQ may, at its option, have an observer present at any emissions tests conducted on a source. DEQ requests that such testing not be performed on weekends or state holidays.

3.8 All performance testing shall be conducted in accordance with the procedures in IDAPA 58.01.01.157. Without prior DEQ approval, any alternative testing is conducted solely at the permittee's risk. If the permittee fails to obtain prior written approval by DEQ for any testing deviations, DEQ may determine that the testing does not satisfy the testing requirements. Therefore, at least 30 days prior to conducting any performance test, the permittee is encouraged to submit a performance test protocol to DEQ for approval. The written protocol shall include a description of the test method(s) to be used, an explanation of any or unusual circumstances regarding the proposed test, and the proposed test schedule for conducting and reporting the test.

3.9 Within 60 days following the date in which a performance test required by this permit is concluded, the permittee shall submit to DEQ a performance test report. The written report shall include a description of the process, identification of the test method(s) used, equipment used, all process operating data collected during the test period, and test results, as well as raw test data and associated documentation, including any approved test protocol.

[IDAPA 58.01.01.157, 4/5/00 and 4/11/15]

Monitoring and Recordkeeping

3.10 The permittee shall maintain sufficient records to ensure compliance with all of the terms and conditions of this permit. Monitoring records shall include, but not be limited to, the following: (a) the date, place, and times of sampling or measurements; (b) the date analyses were performed; (c) the company or entity that performed the analyses; (d) the analytical techniques or methods used; (e) the results of such analyses; and (f) the operating conditions existing at the time of sampling or measurement. All monitoring records and support information shall be retained for a period of at least five years from the date of the monitoring sample, measurement, report, or application. Supporting information includes, but is not limited to, all calibration and maintenance records, all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. All records required to be maintained by this permit shall be made available in either hard copy or electronic format to DEQ representatives upon request.

[IDAPA 58.01.01.211, 5/1/94]

Excess Emissions

3.11 The permittee shall comply with the procedures and requirements of IDAPA 58.01.01.130–136 for excess emissions due to start-up, shut-down, scheduled maintenance, safety measures, upsets, and breakdowns.

[IDAPA 58.01.01.130–136, 4/5/00]

Certification

3.12 All documents submitted to DEQ—including, but not limited to, records, monitoring data, supporting information, requests for confidential treatment, testing reports, or compliance certification—shall contain a certification by a responsible official. The certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document(s) are true, accurate, and complete.

[IDAPA 58.01.01.123, 5/1/94]

False Statements

3.13 No person shall knowingly make any false statement, representation, or certification in any form, notice, or report required under this permit or any applicable rule or order in force pursuant thereto.

[IDAPA 58.01.01.125, 3/23/98]

Tampering

3.14 No person shall knowingly render inaccurate any monitoring device or method required under this permit or any applicable rule or order in force pursuant thereto.

[IDAPA 58.01.01.126, 3/23/98]

Transferability

3.15 This permit is transferable in accordance with procedures listed in IDAPA 58.01.01.209.06.

[IDAPA 58.01.01.209.06, 4/11/06]

Severability

3.16 The provisions of this permit are severable, and if any provision of this permit to any circumstance is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.

[IDAPA 58.01.01.211, 5/1/94]